

CLAIMS

1. A wireless communication method for performing wireless communication between a calling side and a called side, the wireless communication method using a wide-area wireless communication system capable of wireless calling, and a wireless communication system capable of data communication, the wireless communication method comprising:

a call-sending step of sending a call to the called side by the calling side;

a calling step of using the wide-area wireless communication system to call receiving means in a wireless communication terminal of the called side;

a calling detecting step of detecting, by the wireless communication terminal, calling from the wide-area wireless communication system;

a calling notifying step of notifying, by the receiving means in the wireless communication terminal, wireless-communication-controlling wireless communication means that the receiving means has been called;

a connecting step of connecting to the wireless communication system by the wireless communication means;

a communication step of performing wireless communication between the calling side and the called side;  
and

a disconnecting step of disconnecting connection to the wide-area wireless communication system by at least one of the calling side and the called side.

2. The wireless communication method according to claim 1, wherein, in the communication step, a speech conversation is performed.

3. A wireless communication system capable of data communication, comprising:

a calling terminal for a calling side to perform communication;

a network to which said calling terminal is connected;

a wireless communication base station and a wide-area wireless communication base station which are connected to said network; and

a wireless communication terminal for a called side to perform communication,

wherein the wireless communication terminal simultaneously comprises:

receiving means for receiving a call from said wide-area wireless communication base station; and

communication means for performing data communication with said wireless communication base station.

4. The wireless communication system according to claim 3, wherein, in a configuration in which said calling terminal is capable of communicating audio information on said network, said wireless communication terminal comprises:

audio input/output means for inputting and outputting audio; and

audio conversion means for performing mutual conversion between audio information and data information.

5. The wireless communication system according to claim 3 or 4, wherein:

said wide-area wireless communication base station is a pager base station, and the wireless terminal includes receiving means corresponding to said pager base station; and

said wireless communication system is a wireless LAN, WAN, PAN, or ITS (Intelligent Transport System) system.

6. The wireless communication system according to claim 3 or 4, wherein:

said wide-area wireless communication base station is a pager base station, and said wireless communication terminal includes receiving means corresponding to said pager base station; and

said wireless communication system is a wireless

telephone system using a cellular phone or a PHS.

7. A wide-area wireless communication base station for a wide-area wireless communication system in which a calling side is capable of calling a called side, the base station comprising a plurality of means:

network connecting means for connecting to a network which is not for the wide area wireless communication;

calling-request receiving means for receiving a calling request using an identification number on the network for a wireless communication terminal of the called side;

intersystem identification-number converting means for converting an identification number on the network to an identification number in the wide-area wireless communication system; and

calling means for calling the wireless communication terminal by using an identification number in the wide-area wireless communication system.

8. The wide-area wireless communication base station according to claim 7, wherein the wide-area wireless communication system is a pager system.

9. A wireless communication terminal capable of communicating with both a wide-area wireless communication

system capable of wireless calling, and a wireless communication system capable of data communication, the wireless communication terminal comprising:

receiving means for receiving a wireless call in the wide-area wireless communication system;

calling-information recognizing means for recognizing information concerning a calling side and calling details, the information being included in the wireless call; and

wireless communication means for performing wireless communication in the wireless communication system when said calling-information recognizing means requests wireless communication to start.

10. The wireless communication terminal according to claim 9, further comprising wireless-communication-means activating means wherein, in a configuration in which said wireless communication means in the wireless communication terminal is normally in an inactivated state, when the calling-information means requests wireless communication to start, said wireless-communication-means activating means changes said wireless communication means to be activated.

11. The wireless communication terminal according to claim 9 or 10, further comprising:

audio/data conversion means for converting data.

received by said wireless communication means into audio,  
and converting audio of the calling side into data; and

audio input/output means for outputting the audio  
obtained by conversion, and inputting audio of a called side  
to said audio/data conversion means.

12. The wireless communication terminal according to claims  
9 to 11, wherein:

said receiving means is a pager system terminal; and,  
in addition,

said wireless communication means is a network adapter  
for a wireless LAN, WAN, or PAN, or is an ITS (Intelligent  
Transport System) terminal device.

13. The wireless communication terminal according to claims  
9 to 11, wherein:

said receiving means is a pager system terminal; and,  
in addition,

said wireless communication means is a wireless  
telephone terminal device being a cellular phone or a PHS.